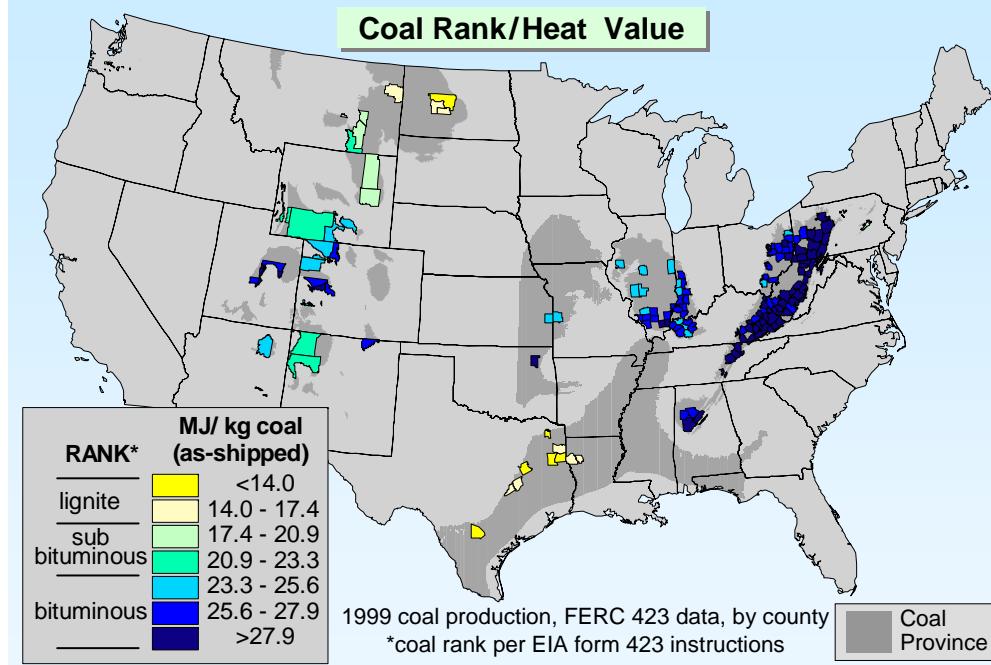
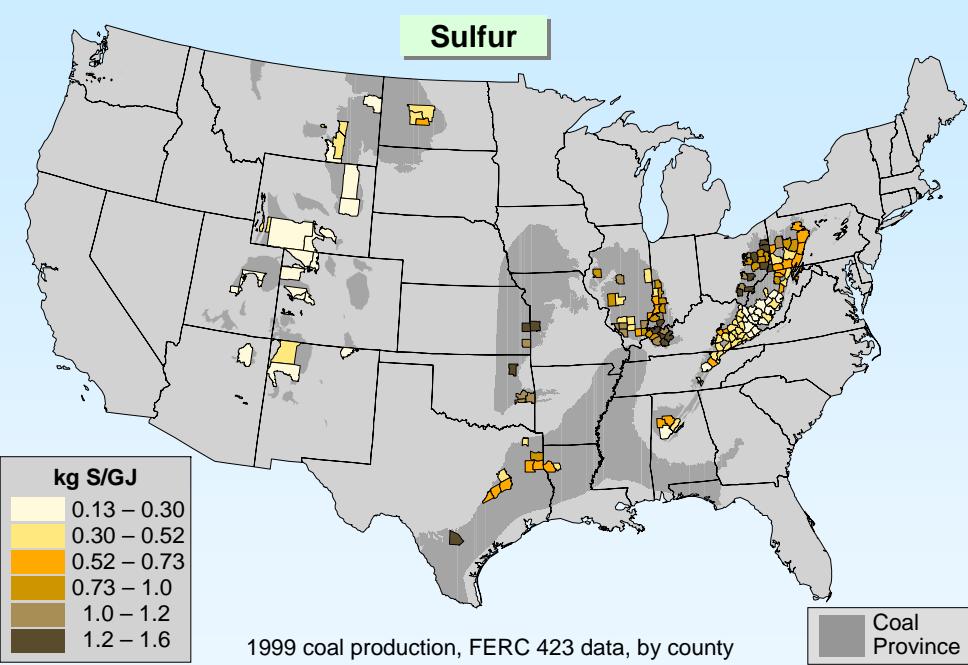
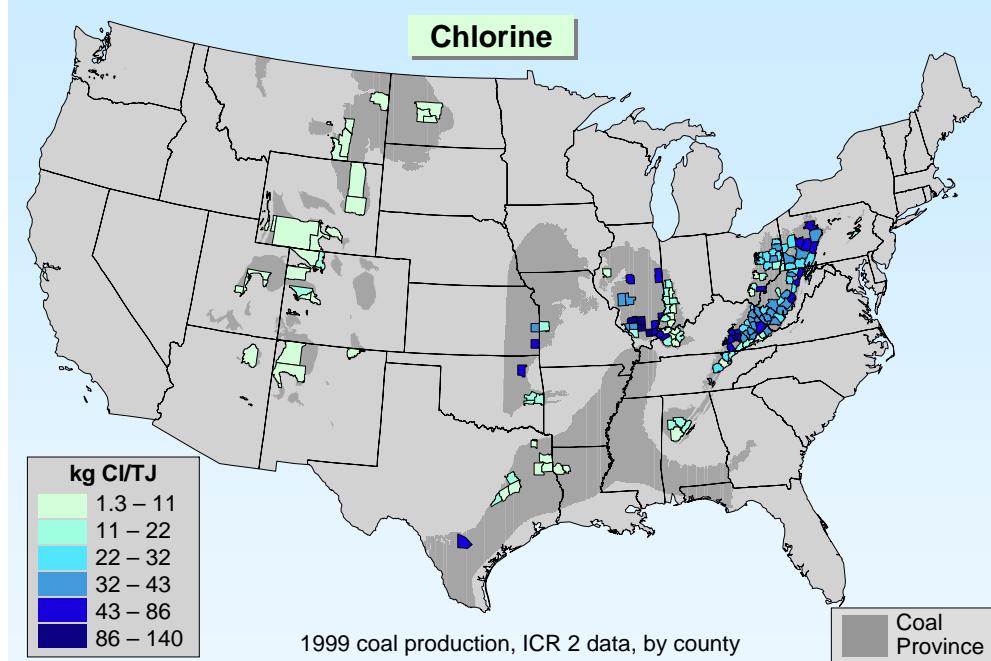
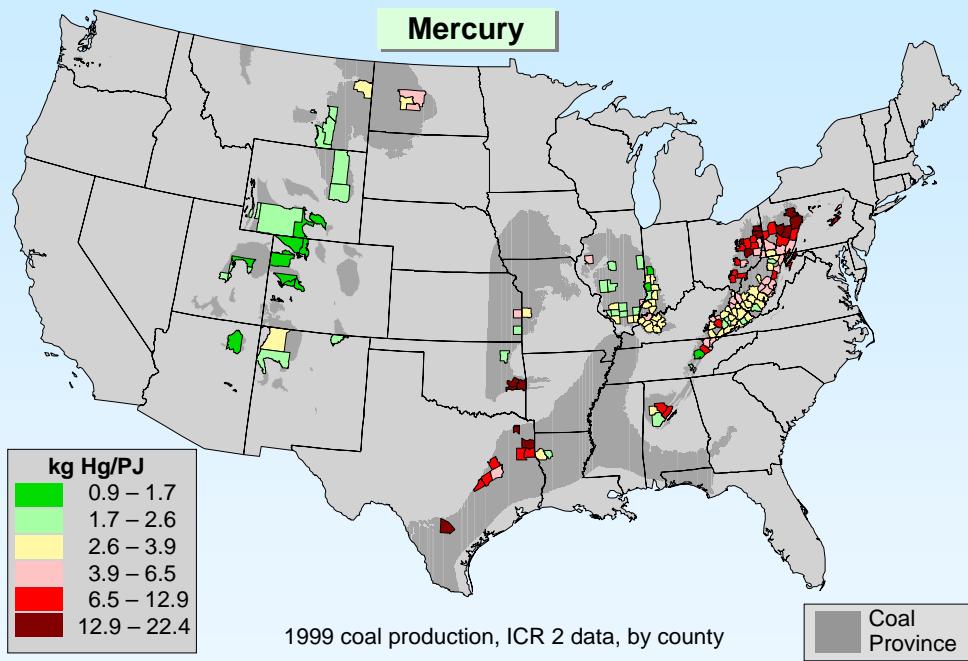


# UNDERSTANDING MERCURY IN USA COAL – A GEOGRAPHIC APPROACH

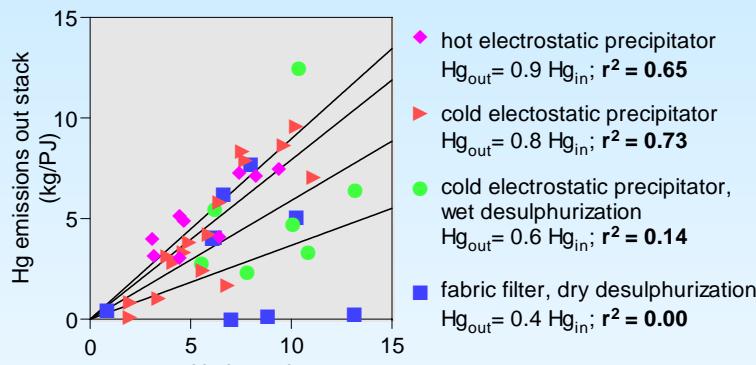
Jeffrey C. Quick, Utah Geological Survey

Web site: <http://geology.utah.gov/emp/mercury/index.htm>

Email: jeffreyquick@utah.gov

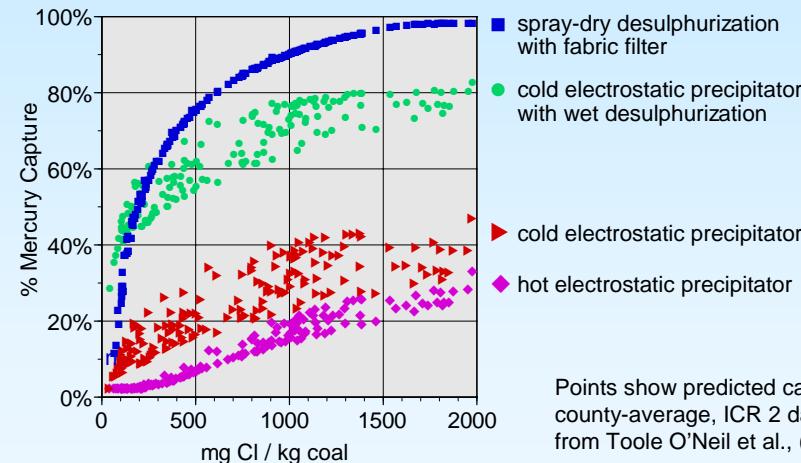


## The significance of the coal mercury content depends on the emission control technology at the power plant.



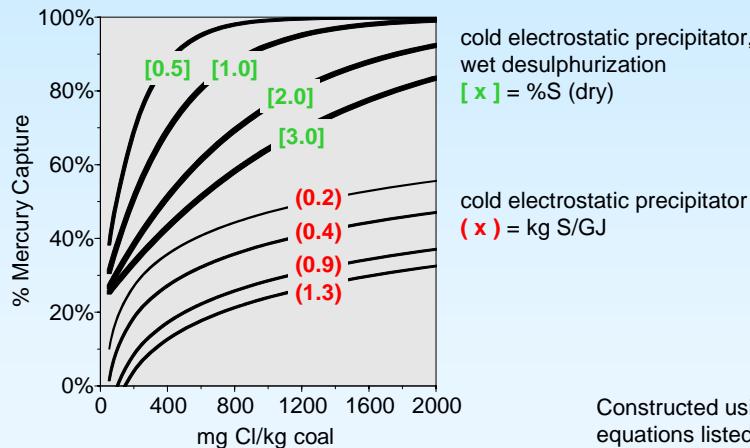
Points show different electric power plants,  
modified from Quick et al., (2005), ICR 3 data.

## Chlorine increases mercury capture by existing emission control technology.



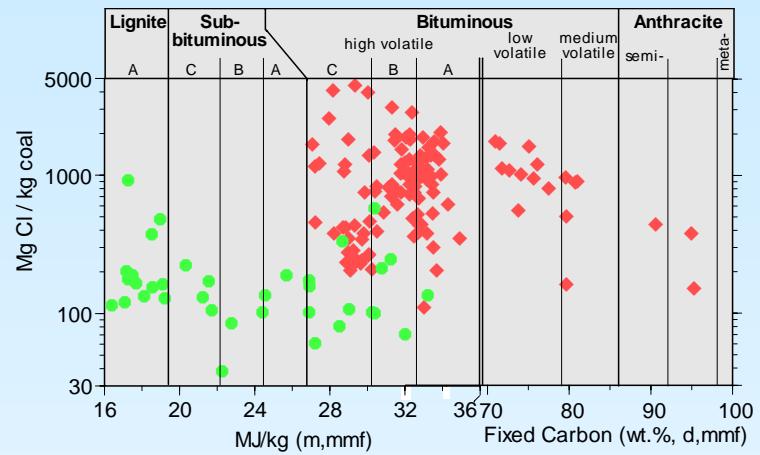
Points show predicted capture for USA county-average, ICR 2 data, modified from Toole O'Neil et al., (2005).

## Sulfur reduces mercury capture by existing emission control technology.



Constructed using EPRI and SAIC equations listed by Quick (2006).

## Chlorine in USA coal varies with rank, but is better explained by geologic age.



Points show USA county-average ICR 2 data, modified from Kolker et al., (in press).

## References

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- ICR 3 (1999) 240 power plant stack emission measurements <[epa.gov/ttn/atw/combust/utiltox/utoxpg.html](http://epa.gov/ttn/atw/combust/utiltox/utoxpg.html)>
- FERC 423 (1999) 19,507 coal assays <[eia.doe.gov/cneaf/electricity/page/ferc423.html](http://eia.doe.gov/cneaf/electricity/page/ferc423.html)>
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